

Commissioner for Patents  
Page 3

Serial No.: 10/621,516

### AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior versions, and listings, of claims in the application:

### LISTING OF CLAIMS

1. (Original) A method of removing water and solids from crude oil containing water and solids to provide a clean dry oil, comprising:
  - a) a separation phase, a dehydration phase and a diluent recovery phase, said dehydration phase including:
    - i) providing a source of crude oil containing water;
    - ii) adding a diluent to said source of crude oil;
    - iii) a separation phase to remove at least a portion of said water;
    - iv) dehydrating said crude oil containing water in a dehydrator having a vaporizing surface of dry crude oil at a temperature sufficient to vaporize water contacting said surface;
    - v) recirculating dehydrated crude oil to at least said vaporizing surface immediately below said vaporizing surface for maintaining a substantially uniform temperature of said vaporizing surface and to vaporize said water and at least a portion of diluent in said source;
  - b) said diluent recovery phase including:
    - i) heating said dehydrated crude to liberate diluent;
    - ii) stripping said diluent from said dehydrated crude; and
    - iii) recirculating recovered diluent to said crude oil containing water in said separation phase.

Commissioner for Patents  
Page 4

Serial No.: 10/621,516

2. **(Original)** The method as set forth in claim 1, wherein said step of stripping said diluent from said dehydrated crude comprises passing said dehydrated crude into a stripping device for separation of said dehydrated crude and said diluent.
3. **(Original)** The method as set forth in claim 1, wherein said stripping comprises treating said dehydrated crude containing diluent to at least one of steam stripping, super critical separation, flashing, vacuum flashing, distillation or a combination thereof.
4. **(Original)** The method as set forth in claim 1, wherein a diluent to crude oil containing water ratio is between 0.1 and 1.0.
5. **(Original)** The method as set forth in claim 4, wherein said ratio is between 0.3 and 0.6.
6. **(Original)** The method as set forth in claim 1, wherein said recovery phase comprises recovering diluent in an amount of greater than 90%.
7. **(Original)** The method as set forth in claim 1, wherein said clean dry oil is devoid of water content and salt compounds.
8. **(Original)** The method as set forth in claim 1, wherein said dehydrated crude has a basic sediment water content of less than 0.5% by volume water.
9. **(Currently amended)** The method as set forth in claim 81, further including the step of upgrading said dehydrated crude oil from between 7 API and 10 API to 21 API.
10. **(Currently amended)** The method as set forth in claim 82, further including the step of upgrading said dehydrated crude oil by unit operations selected from the group consisting of visbreaking, hydro processing, thermal cracking and distillation.
11. **(Original)** The method as set forth in claim 9, wherein said dehydrated crude has a viscosity of 350 CSt at 10°C.

Commissioner for Patents  
Page 5

Serial No.: 10/621,516

12. **(Original)** The method as set forth in claim 1, further including the step of providing a diluent makeup stream for contact with said crude oil prior to pretreating.
13. **(Original)** The method as set forth in claim 1, wherein a portion of said dehydrated crude is recirculated to said source of crude oil.